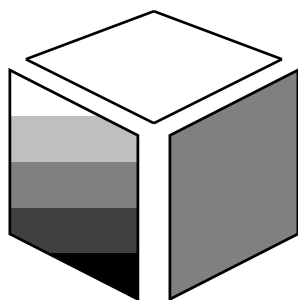


POGLE

DCP

DIGITAL COLOUR PROCESSOR

Update Version 1.6 1st June 1995 Steve Brett



POGLE DCP

OPERATING INSTRUCTIONS

Bought To You By :::

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Primary Colour Controls

The primary colour correction facilities of the DCP were originally incorporated for use when grading material originating from Tape. They were designed to operate in a very similar way to the normal GAIN, GAMMA and LIFT controls found on the telecine.

In practice however we find many Colourists are using the DCP controls in addition to the telecine channel for several reasons. Because of their design the DCP controls have a far greater range than those traditionally found on the telecine in addition they tend to track better and introduce less noise than the older analog types. The extra range of the DCP can be of great use especially when transferring negative film as the telecine controls can be set to achieve the best noise free output from the film whilst the DCP is used scene to scene to perform the actual grading.

The controls operate in a similar way to those on the telecine - - the top left trackerball affects BLACK [lift] and the top right WHITE [gain] whilst the lower control affects GAMMA.

To select DCP primary control rather than standard telecine primary EITHER hold down the left-hand button above the Gamma control until the VDU changes to DCP or open the DCP window and click with the mouse on the three graphs on the lower left.

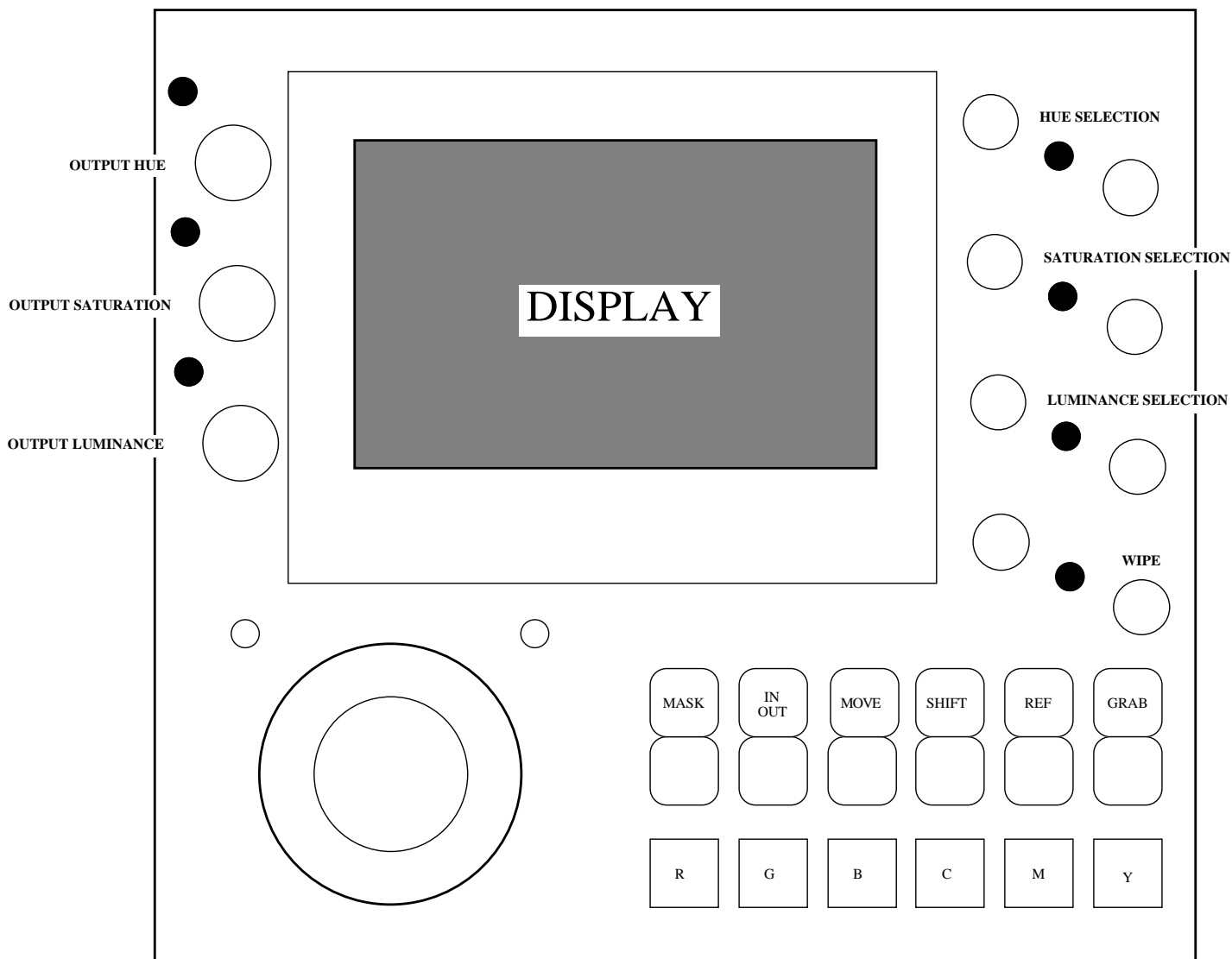
When selected the outline of the three graphs will change from gray to white.

Also on newer control panels the colour of the trackerball illumination will change from green to red.

The VDU display is a representation of a parade display as shown on a scope. Normally the three graphs [one for RED GREEN and BLUE] show a straight line representing a 1:1 transfer curve. Adjust the controls and observe that the shape of the graphs change to reflect the correction being applied.

Future versions of DCP software will allow the shape of the Gamma function to be individually programmed on each channel for special effect.





DCP CONTROL PANEL



Secondary Colour Controls

Starting off and selecting a channel.

As a convenient starting point the DCP is configured as a standard six-vector type Secondary Colour Corrector. One of six channels [R,G,B,C,M,Y] may be selected simply by using one of the six illuminated keys on the POGLE Colour Corrector panel. Once selected the first three encoders on the left of the panel provide HUE, SATURATION and LUMINANCE adjustment for the chosen channel.

Notice that when any of the channels are selected a window will open on the POGLE VDU display showing DCP control parameters. In the centre of this window you will see a representation of a vectorscope display. As each channel is selected a colour 'wedge' is drawn on the 'scope at the appropriate vector.....

more about this display later.

Channel Reset

There are individual reset buttons next to the Hue Saturation and Luminance output controls which may be used to return an individual adjustment to centre.

To reset all the parameters for a particular channel press and hold that channel's selection button. After a short delay the POGLE control panel will Beep and the selected channel will return to centre.

A rapid double press on the selection button will make the channel inactive. The wedge which previously opened on the vectorscope display will be closed up again.

The entire DCP [all channels and the primary controls can be reset in the usual way by clicking on the small asterisk within the DCP control window.

Temporary bypass.

You may see the picture without any DCP secondary correction by using the IN/OUT key.

Notice that as this control is operated a button labelled OUT is highlighted on the VDU.

It is also possible to select this button using the mouse control.

Channel Isolation

For most scenes the preset values of the DCP channels will usually be sufficient however it is a simple matter to alter the range of selection for each channel so that for example a particular shade of red may be adjusted without affecting another similar colour. It is important to note that each of the DCP channels are identical and may therefore be used interchangeable to affect any selection of colours. The starting value of hue assigned to each channel is merely for convenience.



The DCP has a special display mode useful when adjusting each channels colour selection. In this mode the output picture is shown in monochrome EXCEPT for the area of the picture selected by the current channel. Select this mode with the MASK key or by clicking on the button labelled MASK with the mouse.

Changing a channels selection

If a particular channel is picking up too much [or too little] of the desired region of the scene then its selection may be adjusted.

A combination of three parameters are used to decide the isolation of a channel and for each parameter there are two variables.

The most familiar control will be HUE selection this may be adjusted for vector angle and width.

In addition there are LUMINANCE and SATURATION selection controls both of which have a lower and upper level adjustment.

The first pair of knobs on the top right of the Colour Corrector control panel are used to adjust the hue selection. The upper control is ROTATION, as this is moved the colour 'wedge' rotates around the vectorscope and if you have MASK mode enabled various colours will pop into view on the screen.

The lower control is WIDTH this may be used to alter the angle of selection for the vector from either fully open or down to less than one degree.

Observe the VDU display while you adjust these parameters for a graphical representation of what you are doing.

A quick press on the button between the two controls will reset the selection back to the default value. This applies to all groups of controls

The next pair of controls are for Saturation selectivity.

The upper control will include or exclude areas of the current channel based on saturation levels from high to low. The lower control will do the same for saturation levels from low to high.

The selection currently in effect is shown on the VDU by moving the vector scope display in or out from the centre.

Notice that the default position for saturation is set up a little from the centre of the vectorscope this is to avoid the channel picking up the black and white [low saturated] areas of the picture. It is of course possible to move the control all the way down if this effect is required.

The third pair of controls adjust luminance selection. By moving the upper control the brightest parts of the selected channel will no longer be affected - this is the luminance high clip. By rotating the lower control the darkest parts of the selected channel will no longer be affected - this is the luminance low clip.

Luminance selection is represented on the VDU by a row of coloured bars beneath the vectorscope. Normally the selection defaults to full range however as the controls are adjusted the size and position of the bar will alter proportionally.



It is very fundamental to correct operation of the secondary colour processor within the DCP to fully understand the operation of these selection controls. Please take some time to practice on various scenes.

Select an object within the scene to isolate, normally there will be some obvious feature that enables this to be done easily.

For example the object may be a different colour to the background, this is the simplest and easiest example as it is a simple matter then to isolate using hue alone.

First select MASK mode and pick a convenient channel - normally one that is closest to the colour of the object. It is also possible to use any other channel but this may require a few more turns on the control. Adjust the HUE ROTATION until the object appears in colour on the screen.... In all probability when this happens another object of similar colour may also appear and so it will be necessary to narrow the angle of the colour vector selection.

Adjust the HUE WIDTH control slowly to narrow down the selection and at the same time rock the rotation control gently from side to side to ensure that you are centred on the correct vector. It is good practice with all selection controls to only use the minimum amount of adjustment required to get a clean separation between an object and its background. Although it is possible to narrow down to a very small isolation this may cause problems when the film is run due to lighting changes or effects of film grain.

The next most useful control is Saturation, often objects within the scene that are of very similar colour may differ quite dramatically in saturation. This is especially true when dealing with flesh tones which cover a wide range of colours and may therefore not be easily separated in terms of hue alone.

Luminance selection is most useful when isolating backgrounds or particularly areas of sky which may cover a wide range of hue and saturation.

Priority of channels

The channels are in a priority order from left to right. Red, green, blue, yellow, cyan, magenta. Red channel has the highest priority. Magenta has the lowest. If the selection of two channels overlap then the higher priority channel will control the output colour.

This priority may be used to great advantage for certain types of special effect.

For example the second channel [green] may be opened up to control the whole of the scene to make it monochrome, the red channel being of higher priority may then be used to isolate a particular object within the scene leaving it in its original colour.

It may at times be necessary to swap two channels because of a priority conflict.

Swapping the values of two channels

Sometimes it will be necessary to move the selection and output colour from one channel to another. This can only be performed in LIVE or PROGRAM mode as whilst in TRIM the values of a particular channel have not been fixed.

To use copy mode click on the required channel's luminance bar, beneath the vectorscope display in the middle of the DCP window. The cursor will change colour to red and the bar will turn white. Then click on a second channel. The setup values of the two channels will be swapped. To cancel the swap, click on the same channel



again.

Making parts of the picture monochrome.

Take a low priority channel such as Magenta.

Adjust the HUE WIDTH selection control to fully open the channel to accept all colours.

Decrease the lowest saturation selection by adjust the Saturation low-clip.

This has now selected the entire picture, to be controlled by the Magenta channel. You may now use the DCP output saturation knob to turn the picture to mono.

It is now possible to use a channel of higher priority to select an object, which will appear through the monochrome layer produced with the Magenta channel. If no adjustment is made to the output colour controls of the chosen channel the object will be left in its original colour.

Using the colour wash modes

The DCP has the ability to isolate areas of the scene that contain little or no colour information. For example it is possible to select an area of sky that is very pale and add colour to it. Sometimes when this happens the effects of film grain or other artifacts introduce an undesirable patchiness to the resulting image. This is the unavoidable effect of drastically increasing saturation in an area that is in fact composed of many tiny dots of different colours.

In order to bypass this problem the DCP has a unique feature which removes colour detail from the input scene and replaces it with a fixed value. This is WASH mode and it may be separately enabled for Hue, Saturation and Luminance on each channel by using the mouse to click on the boxes marked H S L beneath the vectorscope display on the Pogle VDU.

In the example above enable HUE WASH to remove coloured patches from the sky and replace with a fixed value of blue. All luminance and Saturation detail is still maintained so the output picture still looks like a natural image.

Saturation wash is useful in combination with Hue when producing Sepiachrome or other coloured backgrounds. Follow the example above to make a master channel then instead of taking the picture to Mono enable first the Hue Wash to introduce a fixed colour into the background. [Use the normal output Hue and Saturation controls to adjust the colour]. At the moment you will notice that although the coloured areas of the picture all adopt the new wash colour there will be areas of black and white which stubbornly remain. This is where Saturation Wash comes in useful as when this is enabled the effect will cover the whole image.

Luminance wash has a far more drastic effect on the image however it may be used to great advantage with Blue-Screen type material where it may be used to replace entirely the blue background with one of a more consistent colour removing the effects of camera and lighting and thus ensuring a more successful chromakey in later stages of post production.



Soft Edges and Filtering

If the correction being applied to a particular scene is extreme or if it is difficult to make an accurate colour isolation then there are various filters which may be enabled to smooth out the correction signal and to make a far more natural looking image.

This is one area of the software that is likely to change rapidly in the near future as we are still experimenting with different types of algorithm. Please see the POGLE READ ME file for latest details.

At present there [s/w version 1.60] there are three filter functions....

The simplest appears on the VDU as a horizontal slide control on the top left of the DCP window. This is the blending control and effects all secondary correction signals equally. Normally this control should be centred. Try moving it with the mouse slowly from side to side to observe the effect. The left and right hand positions use slightly different algorithms. The filter is based on a 3x3 window and is useful for smoothing off sharp transitions between background and isolated objects.

The second and third filter functions are closely related but have the advantage of being controlled on each channel individually. These work in a 3x5 window and have slightly more range than the master blending control.

On the lower right hand side of the DCP window you will see a row of six pairs of boxes. [One pair per channel] Normally all positions will read 0 however using the mouse you will find that each position may be adjusted to sixteen possible positions.

For each channel the top box of the pair adjust a threshold level for the selection on that channel. Normally the default value of zero ensures that the particular channel will accept every possible pixel of the correct value. If however the video signal is noisy or grainy then turning up the threshold will mean that only continuous blocks of correctly coloured pixels will enable the channel. This has the effect of removing some of the random sparkles introduced by a slightly uncertain colour isolation.

The lower box adjusts a ramp up/down value for the channel. Normally on a clean image the correction signal should start right at the edge of the isolated area. Adjusting the ramp control has the effect of fading the correction signal up and down as it enters and leaves the area of selection thus softening the effect of the correction. The above two controls are somewhat interactive and tend to have different reactions depending on the nature of the image. Please experiment for best effect.



Using reference wipes

A row of boxes labelled 0 to 4 appear at the top of the DCP window these are used to hold selections for various combinations of the DCP reference facility. By default these boxes will recall features similar to those described here however they may be reprogrammed by the user. Please refer to the READ ME file on POGLE as this is another area that is being rapidly revised.

Click on box 0 to return to the standard default setting. The output picture will be a correctly timed full screen display with all colour correction circuitry enabled. Normally this mode will be used when transferring to tape. The buttons on the PogleColour Corrector control panel may be used to control a reference wipe in a similar way to the original Rank Digiscan function. [Note that the Telecine control is still available by using the mouse to drive the control bar in the Telecine Window]. Using the buttons REF ON/OFF enables the function which may be adjusted using the lower right hand control. GRAB freezes the reference picture.

New facilities are MOVE which alters the direction of the wipe from either left to right or top to bottom and SHIFT which enables the position of the reference frame to be adjusted relative to the position of the output. Hold down the SHIFT button to reset the position of the reference back to standard or simply reselect box 0 using the mouse.

The source of the reference picture may be controlled using a box on the left hand centre of the DCP window options include

- VT [external input]
- TK [uncorrected]
- TK PRIM [primary correction only]
- TK FULL [primary + secondary]
- KEY [which shows colour isolation for the selected channel].

Other selection boxes 1-2-3 etc. provide various type of picture -in-picture display.
Click on the box marked MOVE to adjust the position of the reference.

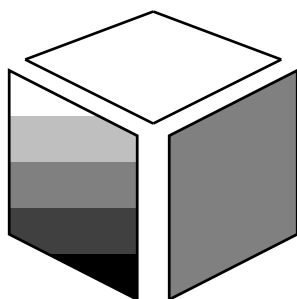
Switching From Telecine to Tape-Tape Colour Correction

Select the DCP SETUP button using the mouse. In the window that appears a button labelled GRADE TK / GRADE VT may be used to select input to the DCP.

When either input is selected for colour correction it is still possible to view the other using the reference facility.

See POGLE manual for details on tape-tape control and editing.





POGLE DCP

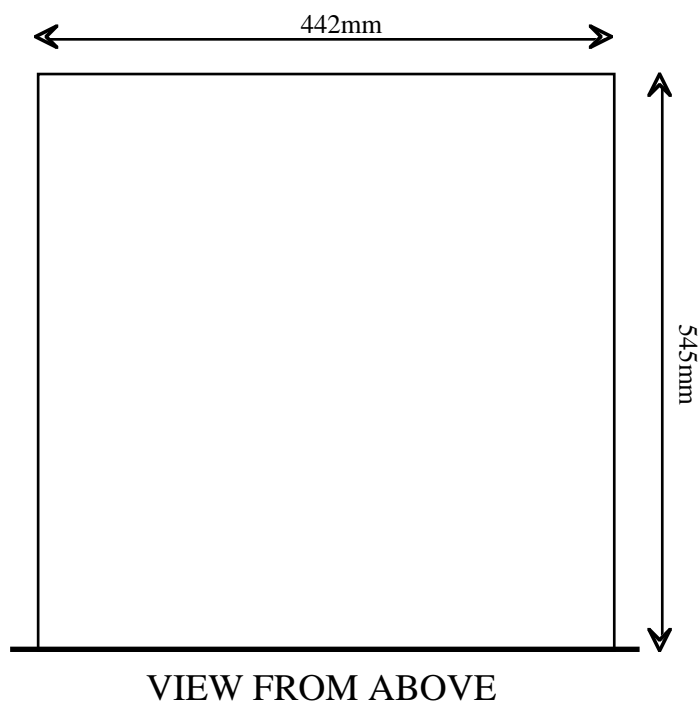
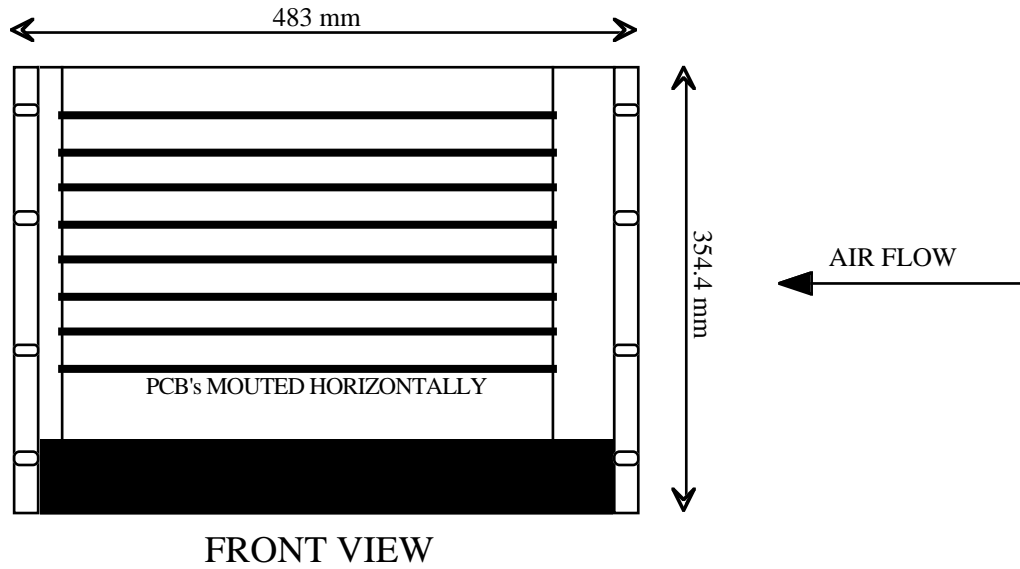
INSTALLATION

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DCP RACK DIMENSIONS



Installing Circuit Boards

In its current configuration [December 92] the DCP contains three large circuit boards as follows :::

PBX10BK4 4444 INPUT CARD

This card carries the following circuitry ...

- Two 4:4:4 inputs each with line store for input synchronisation.
- 4:2:2 interpolation circuitry to produce a pseudo 4:4:4 signal from a 4:2:2 input.
- YUV/RGB digital matrix.
- Test Signal generator.
- Wide Band [6 vector type] Colour Corrector
- Master Luminance Saturation and Hue controls

PBX10CK COLOUR SPACE PROCESSOR

Most of the signal processing is performed by this card.

- Primary colour correction three identical channels driven by dedicated DSP processors.
- Secondary colour correction mainly constructed using dedicated hardware in gate array LSI parts controlled by dedicated DSP processors.

NOTE :: The DSP processor components used on this board are packaged in CQFP packages which are in turn mounted into high pressure clamp sockets.

ON NO ACCOUNT SHOULD THESE DEVICES BE REMOVED FROM THEIR SOCKETS as special tooling is required to handle these very delicate parts.

PBX10KK OUTPUT and CONTROL

This card handles most of the timing and control functions of the DCP as well as two main video outputs....

- Sync processing and clock generation.
- Control CPU
- Video frame stores [one for each output]
- Reference frame store.
- RGB clipping
- YUV/RGB output matrix.
- 4:4:4 - 4:2:2 down conversion and filtering.
- 4:2:2 outputs.

The PCB's are normally supplied packed into a separate box.

Please unpack carefully and check that all components are fully seated into their sockets.

[Note ON NO ACCOUNT apply pressure to the DSP sockets on the PBX10CK card as this will damage the devices mounted within].

The boards will be inserted into the mainframe in the positions shown on the following diagram the following procedure is recommended



DCP Mainframe

The DCP backplane uses high density edge connectors which because of their density require a high insertion force.

When installing the system for the first time the following procedure is recommended.

- 1] First remove the top cover [secured by two M3 screws] and ensure that the two linking boards which should already be mounted into the rack are fully inserted.
The gold screening tags which form the outer casing of the edge connector should be fully enclosed within the body of the backplane connector.

The two ribbon cables which join these boards should also be checked for firm seating.

- 2] Install the PBX10KK in the lower card position first.
This requires considerable pressure.
If correctly inserted the connector will be felt to click into place after the initial resistance.
- 3] Next install PBX10CK in the card position above the top linking card.
[3rd from the top]. Inspect the edge connector to ensure that it is fully home.
- 4] Finally install the PBX10BK card directly above PBX10CK.
[2nd position from top].

Symptoms of badly inserted cards will be very visible.

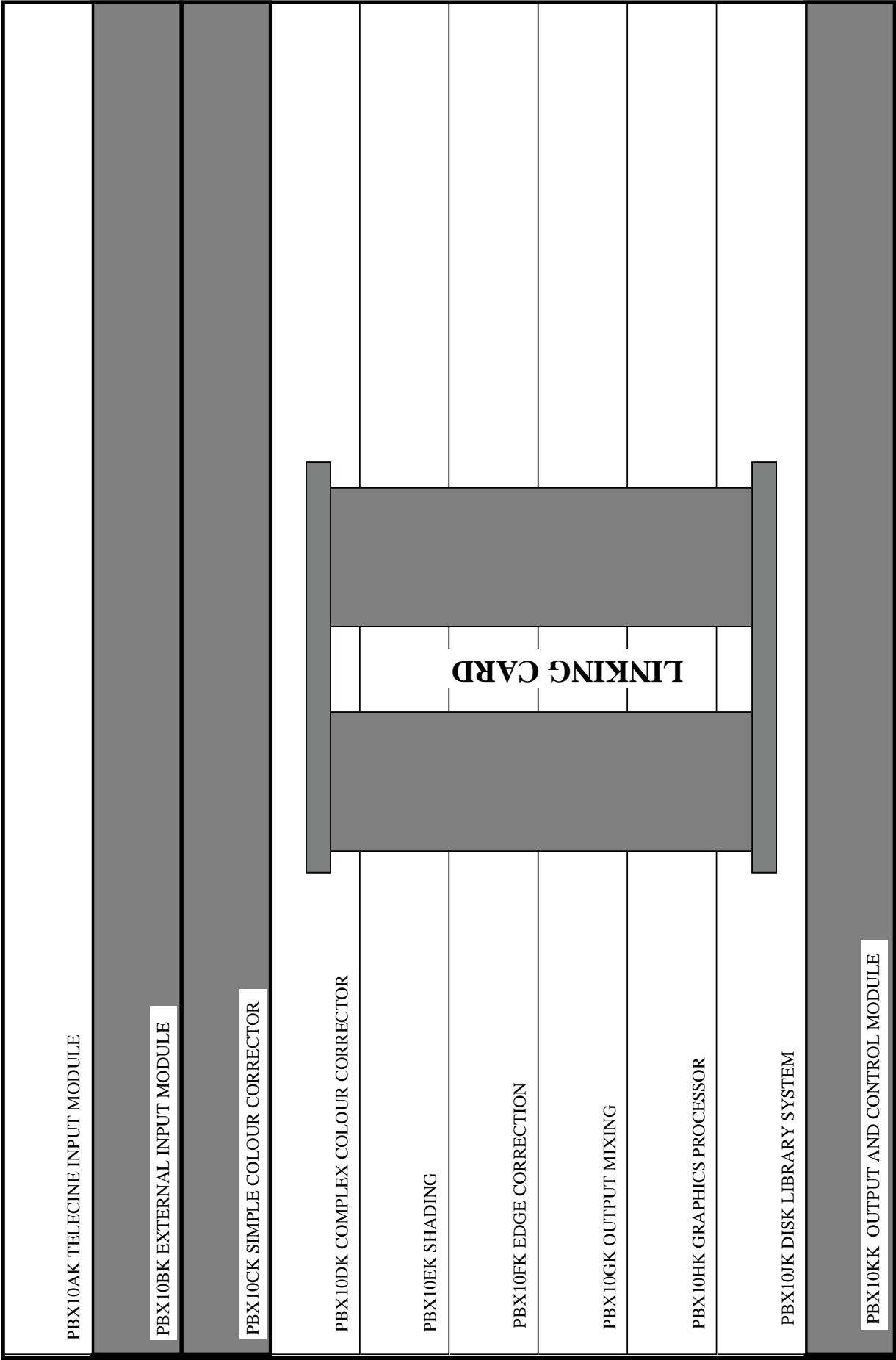
Missing bits from the video signal causing banding and miscolouration.

Digital noise.

Unlocked video outputs

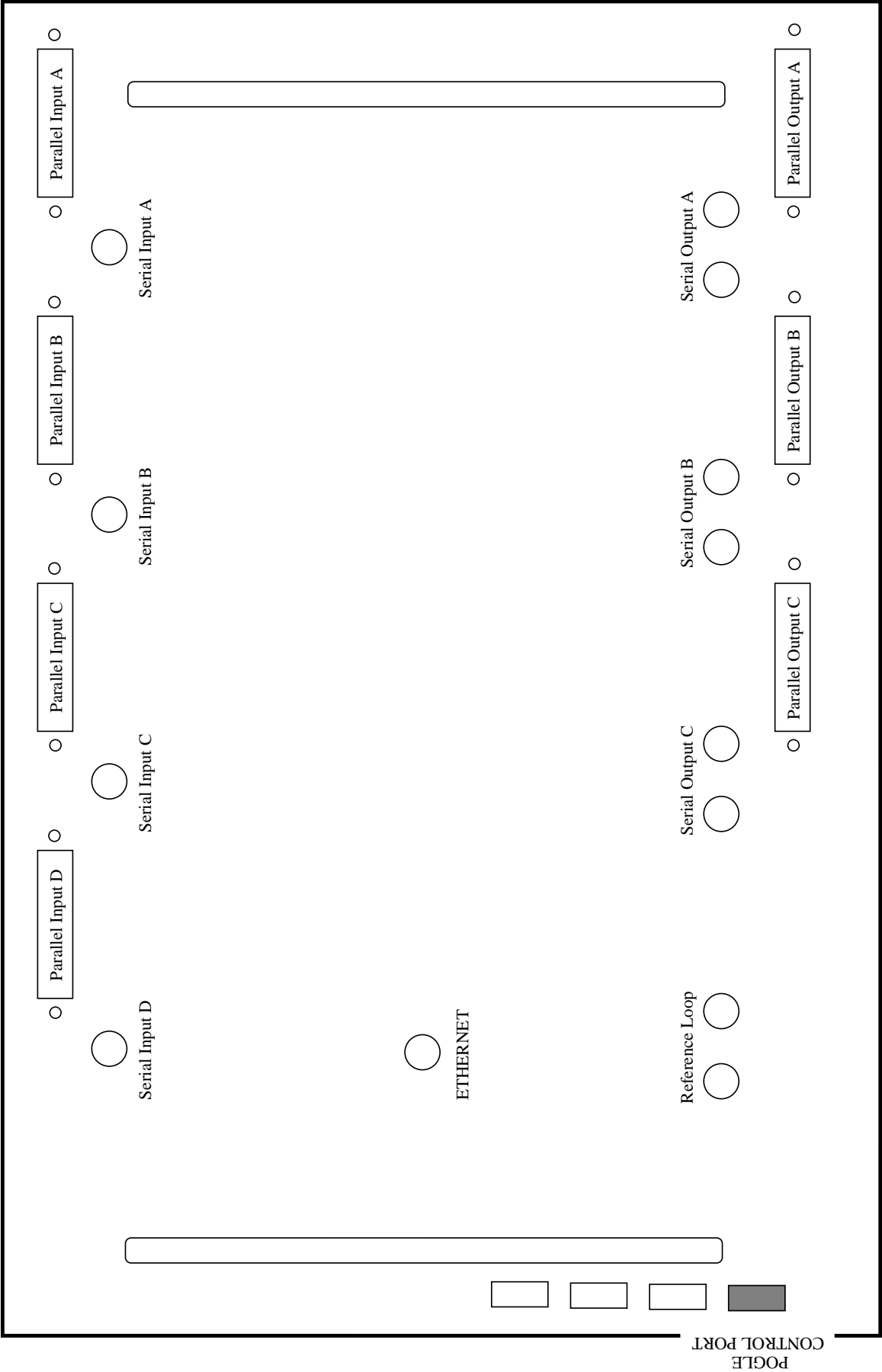
etc. etc.





DCP CARD MOUNTING [current implementation]





DCP REAR PANEL VIEW

DCP REAR PANEL - EXTERNAL VIEW



System Wiring

The DCP is very simple to install requiring little more than video in and out and a reference signal.

There are two pairs of 601 video inputs. Each may be either parallel [25 way connector] or serial [BNC]. Selection between Parallel or serial format is currently by means of a link behind the panel.

The inputs are equipped with line stores for synchronisation. This means that the two pairs of inputs may be mis-timed by up to half a line [either early or late] relative to reference syncs.

If the telecine is equipped with a film grain or noise reducer it is preferable to install this device up stream from the DCP. The colour isolation within the DCP works more effectively on a noise free signal.

422 INPUT CONFIGURATION.

Inputs A and B only are in use. Inputs C + D are spare.

Software within POGLE assumes that input A will be connected to Telecine whilst Input B is used for VTR.

4444 INPUT CONFIGURATION.

Inputs A is paired with Input C. Normally the 4:2:2 signal carrying luminance information is applied to A whilst the remaining 0:2:2 signal [extra chroma information] is applied to C. The spare luminance channel of input C forms a KEY input which may be used as an area isolation if the Complex Colour Correction Module is fitted.

Similarly Input B is paired with input D.

OUTPUT

Outputs are provided in both serial and parallel format.

Output A is only available in 4:2:2 configuration.

If 4444 option is fitted output B may be set to 4444 mode in which case it is paired with additional output C.

Output C is only driven if 4444 option fitted.

Software within Pogle may be used to control each output individually e.g. Reference may be enabled only on one output.

As the DCP contains a frame store the delay through the system is exactly one video frame. This delay must be taken into account when using the edit controller within Pogle [see the appropriate manual for details].

The exact timing of the DCP output may be adjusted from the Pogle control panel as can the position of blanking. Note however that both outputs are timed simultaneously.

The DCP requires a ColourBlack reference signal to genlock.

The system automatically senses 525 and 625 line syncs.

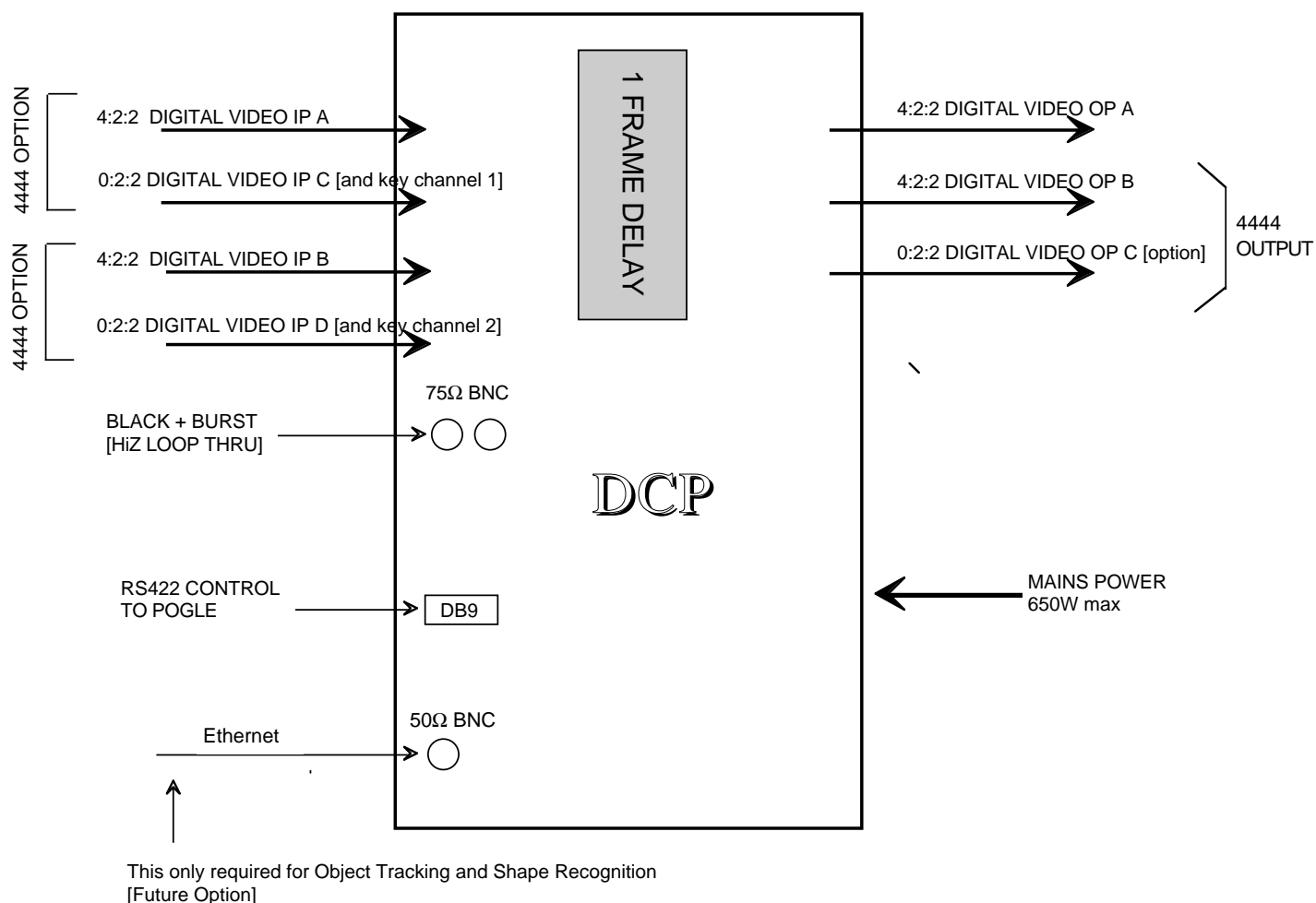
Control from POGLE is currently via a single RS422 link using a 9 pin connector.

At the POGLE end this is installed into the second port from the right [as seen from the rear of the rack] next to the one used for the Pogle control panel. On older racks this will probably be labelled SPARE.

At some point in the near future control protocol will switch to the ETHERNET port which requires a 50Ω coaxial connection.



PANDORA DCP EXTERNAL CONNECTIONS [current Implementation]



Telecine [having first passed thru a film grain reducer] is connected to Input A [and C if 4444 option fitted].

The output of the House Digital Routing switched should be connected to Input B.

This allows any VTR or Disk Recorder in the system to be used either for matching purposes or [if connected remote to POGLE] tape-tape colour correction.

Outputs A and B are electronically identical however they can be individually configured from POGLE. One way of using the outputs is to use A as the main Telecine output which is fed the the house routing system VTR's etc. whilst B is used for monitoring within the Telecine suite. It is then a simple matter to enable thereference wipe only on the B output thus ensuring that whilst the colourist may use it at any time there is no danger of accidentally recording the reference signal. OUTPUT B only may be optionally configured for 4444 operation.

DCP requires a feed of Black+ Burst Analog Timing Reference - This must be the same signal as fed to the POGLE computer.

DCP SYSTEM WIRING [Current Implementation]



POGLE Setup

The Pogle system will need to be correctly configured to control the DCP. Please refer to the Pogle setup manual.

Software versions 1.5 onwards should already include DCP control facilities. However the DCP when it arrives should be supplied with the latest version which should be installed at this point.

TELECINE SETUP MENU

Toggle the selections in the secondary colour corrector window until the display reads RANK+DCP. This selection is correct even if you are using a BTS telecine or NO telecine

STORE this setting.

CONTROL PANEL SETUP

Using the DISPLAY key on the control panel toggle through to the DCP display on the VDU. It is very likely that the positions of all controls will be random. This is because the POGLE does not at this point have a default configuration file for the DCP settings. To create this file choose CONTROL PANEL SETUP from with the Telecine setup window. On the SECONDARY line select LINEUP. This should force all controls to their centre positions. It will now be necessary to save this lineup condition into each of the boxes [35mm 16mm etc] for all film types. Please do this methodically to ensure that none are missed.

Reboot the POGLE to ensure that the settings are correctly stored onto the system disk.

NOTE ... each time a new selection is made for the colour corrector within the Telecine setup window it will be necessary to repeat the above procedure.

This is because the choice of SCC determines the configuration and channel allocation of parameters for each event within the Pogle list. When the control panel is reset the parameters stored on hard disk are mapped to the currently defined channels which are widely different for varieties of colour corrector.

USER MENU

Once the DCP is selected a new line of sensitivity controls will appear within the USER setup window. These enable the sensitivity of the DCP primary colour balance controls to be setup differently to the telecine channel.

It is possible that when DCP is configured for the first time these new settings will default to zero which means that the controls will be set incredibly slow -- please adjust and store a new value into each user.



DCP SETUP WINDOW

The DCP setup window is accessed by selecting SETUP from within the DCP control window.

Output timing adjustments are made from within this window as well as control over various mode for the reference store etc.

Please read the READ ME file on each new POGLE software update as this is an area which is subject to change.

DCP SETUP WINDOW

XR 745		YR 520
X1 0		Y2 0
X2 745	MOVE	Y2 240
	BOTH	
BX1 0		BY2 0
BX2 745		BY2 240
INPUT	TEST 5	OVER
	Z1	F P
OUTPUT A	COL	B COL
INV	GRADE TK	TIMING

Select an input to the DCP by selecting either GRADE TK or GRADE VT from the bottom of the DCP setup menu this selection will toggle and configures the DCP either as a film to tape transfer device or from a D1 source using the second input.

Do not worry at this stage if the output of the DCP is the wrong colour or wrongly positioned.

Next select TIMING in order to adjust the output picture positioning and blanking setup.

This causes another menu to appear.

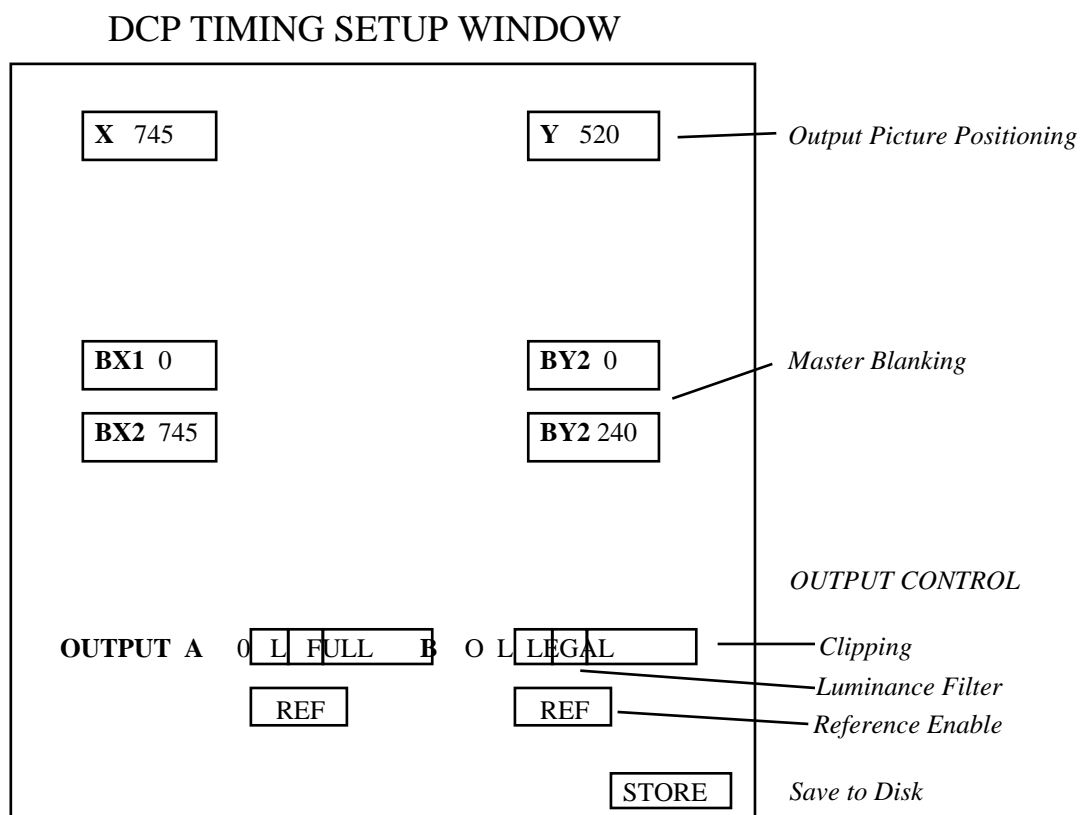


The two parameters on the top line of this window adjust the x and y picture positioning for both of the DCP outputs.

These may be adjusted either by clicking and using the mouse to increment or decrement the value or by typing a number using the numeric keypad and clicking in the appropriate box.

Note that the numbers are only displayed for reference only, they correspond to an internal setting within the DCP not to system parameters.

Try starting values of 745 for X and 520 for Y.



Output blanking can also be configured from this menu.

There are two settings for X and two for Y these adjust left+right and top+bottom blanking respectively.

Note that the blanking values saved within the DCP timing window are master engineering settings. A second set of adjustments are also available which allow blanking to be controlled scene to scene for special effect however these user adjustable settings can never be configured to be wider than the Master settings.

Various controls are provided for the A and B outputs.

The first parameter is a rounding control for the output RGB/YUV matrix. Normally this should be set to 3 which selects Dynamic rounding [under license from Quantel] . Other settings are 0 [normal rounding] and 1 [even rounding]

The 'L' controls a low pass filter in the luminance channel. Normally the L should be illuminated giving full bandwidth. If turned off a 5.5MHz digital filter is introduced.



The next box toggles between FULL and LEGAL. This is the output clipping which is performed within the RGB domain. If LEGAL is selected clipping is introduced to ensure that no illegal video levels are generated.

The final output control is REF if enabled the reference frame may be viewed on the appropriate output.

After setting all values click on the STORE button on the bottom line of the setup window to record the settings to disk.

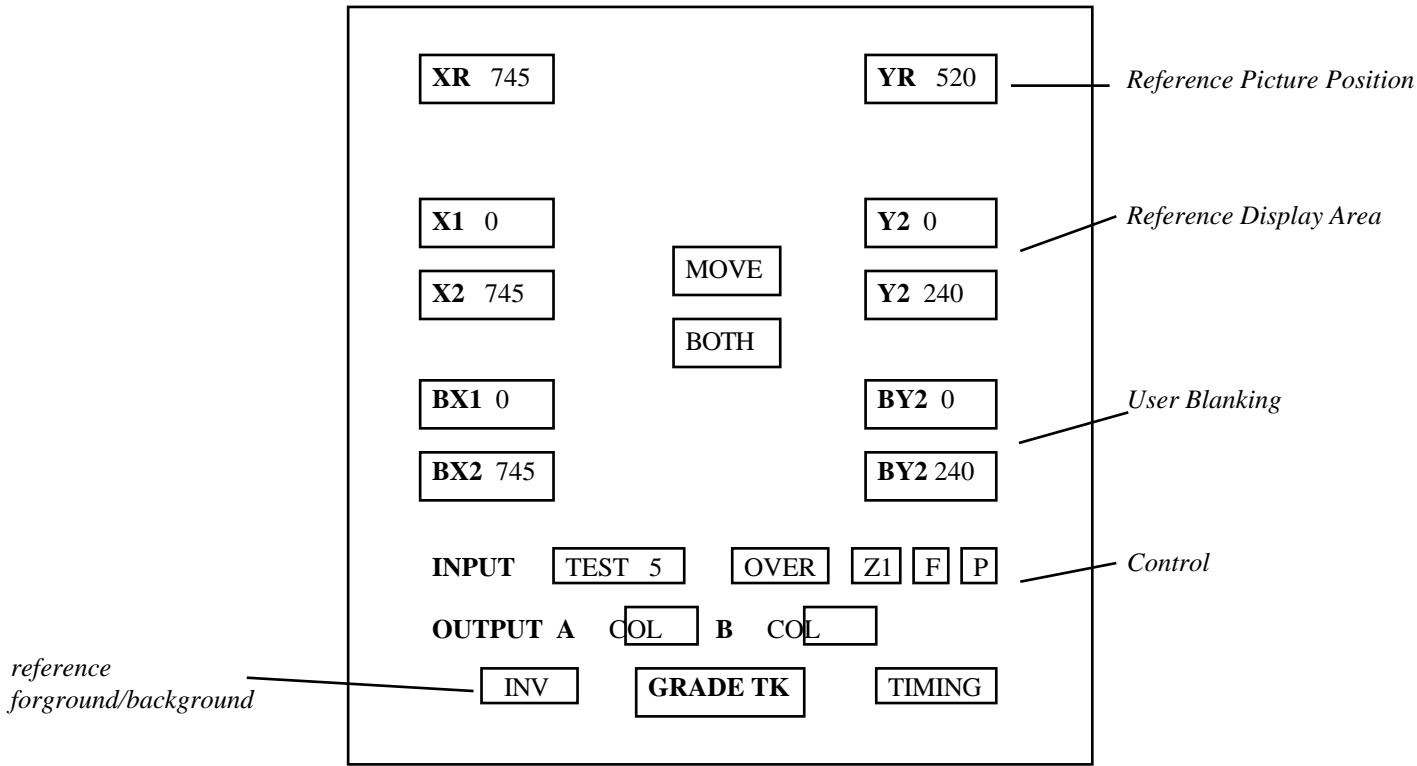
NOTE :: that as a safety feature to prevent accidental erasure of stored settings it is necessary to HOLD DOWN the SHIFT key on the QWERTY keyboard whilst clicking on the STORE button.

Different files are stored on the disk for PAL or NTSC settings and are automatically recalled as appropriate. This means that if you intend to work with both standards the above setup will need to be checked and stored for each.

Having setup the main output timing it is now necessary to return to the first DCP setup window and configure the reference store and other functions.

Click on the SETUP button within the DCP control window to select the SETUP window.

DCP SETUP WINDOW



The first two settings on the top line of the window are the picture position control for the reference frame. It is possible to move the reference frame independantly of the main picture so that for example two objects within the scene can be compared side by side. At this time however it is important to set up the reference with the SAME X and Y parameters as entered for the main video output timing.



The next group of parameters X1,X2,Y1,Y2 control the position of the window through which the reference frame is viewed. In normal operation these settings are adjusted automatically using the WIPE control on the panel however access is provided so that the user may set the size and position of the reference window more accurately for special purposes. It is possible to save a number of settings for later recall.

To set these values to a default condition press and hold the MOVE key on the Colour Corrector panel after a while a beep should be heard and the values will be set as follows.....

X1	0
X2	0
Y1	0
Y2	310 [pal] 257 [ntsc]

Ensure that the reference store is enabled in the DCP TIMING SETUP window for the output that you are currently viewing.

Turn reference on either by using the REF key or with the mouse in the DCP control window.

Ensure that TEST and OVER are turned off in the SETUP window.

Click on the box Z0/1/2/3 until Z0 is displayed - This is the reference picture zoom control.

Make sure the F and P buttons are turned off [these are for test purposes only]

Ensure that INV is turned on in the SETUP window.

Click in the reference source select button to set the source of reference as follows

If you are currently viewing the TK input set the reference source to be TK only.

This enables you to simultaneously view DCP colour corrections and the original unprocessed input.

Similarly if you are using the VT input set the source to be VT only.

If you now adjust the WIPE control wheel [bottom right on Colour Corrector Panel] the reference picture should appear from the left hand side of the screen. Make a colour adjustment using the primary colour controls of the DCP and you should be able to clearly see the position of wipe. If no colour adjustment is made the wipe position should be invisible.

At this point select TIMING from the SETUP window and STORE the values to disk.

Remember to use the Shift key on the qwerty keyboard as you click on the STORE button.



The other functions within the DCP SETUP window are as follows

BX0,BX1,BY1,BY2 are used to adjust the USER blanking the values of these may be stored in the list and adjusted from scene to scene either as cuts or dynamically.

TEST overrides the current input selection to the reference store and enables the DCP test signal generator. Various test signals may be selected by clicking on the number next to the TEST button.

OVER inserts a few lines of the currently selected test pattern at the top of the picture currently viewed. This may be useful to gauge some idea of how the colour corrector is modifying the picture.

Z0/1/2/3 This is the reference store zoom control. Normally it should be set to Z0.

Z1 produces a field interlace mode in the reference store

Z2 produces a quarter size image

Z3 produces a eighth size image.

It is necessary to adjust the X1/X2/Y1/Y2 controls to correctly frame the image.

F Is for test purposes only.

The effect is to rapidly toggle [at frame rate] between the main video output and the reference store.

This may however be useful in some situations to precisely match the positions of two pictures.

P Is also for test purposes.

It is a software reset for the DCP which causes all setup parameters to be restored to the values currently displayed in the setup windows.

This may be useful if the DCP has been reset and has lost communication with POGLE.

COL B/W

Each output has a switch which may be used to disable the chroma channel.

This produces a true monochrome output.

INV Should normally be set on.

Swaps the reference frame from background to foreground.

GRADE TK GRADE VT

DCP input selection.

